



Docket No.: 274123US0PCT

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313



RE: Application Serial No.: 10/539,798
Applicants: Hirokazu ITO, et al.
Filing Date: August 11, 2005
For: POLYESTER RESIN COMPOSITION FOR TONER
AND TONER
Group Art Unit: 1711
Examiner: ACQUAH, S.A.

SIR:

Attached hereto for filing are the following papers:

Supplemental Response;

Declaration Under 37 C.F.R. 1.132 (Shinya YAMATO, executed, 5 pages)

Our check in the amount of -0- is attached covering any required fees. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R. 1.136 for any necessary Extension of Time to make the filing of the attached documents timely, please charge or credit the difference to our Deposit Account No. 15-0030. Further, if these papers are not considered timely filed, then a petition is hereby made under 37 C.F.R. 1.136 for the necessary extension of time. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Norman F. Oblon

Harris A. Pitlick

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Customer Number

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DOCKET NO: 274123US0PCT



IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
HIROKAZU ITO, ET AL. : EXAMINER: ACQUAH, S. A.
SERIAL NO: 10/539,798 :
FILED: AUGUST 11, 2005 : GROUP ART UNIT: 1711
FOR: POLYESTER RESIN :
COMPOSITION FOR TONER AND
TONER

SUPPLEMENTAL RESPONSE

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Supplemental to the amendment filed January 8, 2007, **submitted herewith** is a
Declaration under 37 CFR 1.132 of named coinventor Shinya Yamato (Yamato Declaration)
in support of Referential Comparative Examples 1, 2, 3 and 4, described therein.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon

A handwritten signature in black ink, appearing to read "H. Pitlick", written over a horizontal line.

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NFO:HAP\



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Hirokazu ITO, et al.

Serial No.: 10/539,798

Group Art Unit: 1711

Filed: August 11, 2005

Examiner: Samuel A. Acquah

For: POLYESTER RESIN COMPOSITION FOR TONER AND TONER

DECLARATION UNDER 37 C.F.R. 1.132

Assistant Commissioner for Patents

Alexandria, VA 22313

Sir:

I, Shinya YAMATO, c/o Toyohashi Plants, Mitsubishi Rayon Co., Ltd., 1-2, Ushikawadori 4-chome, Toyohashi-shi, Aichi 440-8601, Japan do hereby declare:

That I am a co-inventor of the invention in the above-identified U.S. application (hereinafter referred to as "present invention" for brevity) and hence I am fully familiar therewith;

That I have read and am fully familiar with the art cited against the claims of the above-identified U.S. application (hereinafter referred to as "present application for brevity);

That, in conjunction with the other co-inventors, I carried out the working examples including comparative examples set forth in the specification of the present application, and the results were as set forth therein;

That, to show that the present invention should be patentably distinguished from the cited art, I carried out the following additional working.

Additional Working

Referential Comparative Examples 1 and 2

The procedures of Example 1 of the present application for the preparation of Toner 3, Table 3, were repeated except that Resin HA was employed instead of Resin HC in Referential Comparative Example 1 and that Resin HB was employed instead of Resin HC in Referential Comparative Example 2.

The results of evaluation of the obtained toners are shown in Table A below along with the results of Toner 3 as

shown in Table 3.

Table A

		Referential Example 1	Referential Example 2	Example 1 Toner 3
	Ratio of mixture of resin (parts by mass)	Resin HA:resin LC = 20:80	Resin HB:resin LC = 20:80	Resin HC:resin LC = 20:80
	C ₃ -C ₁₀ aliphatic diol component in polyester (A) (parts by mole)	59.9	54.9	30.5
Resin properties	Fixability	G	G	G
	Offset resistance	P	P	G
	Blocking resistance	G	G	G
	Gloss	VG	VG	VG

Referential Comparative Example 3

The procedures of Production Example 1 of the present application were repeated using the monomer prepared composition as shown in Table B below to obtain Resin HM with a softening temperature of 130°C as shown in Table B and then the procedures of Example 1 of the present application for the preparation of Toner 15, Table 3, were repeated except that the obtained Resin HM was employed instead of Resin HI.

The results of evaluation of the obtained toner are shown in Table C below.

Table B

				Resin HM
Monomer Prepared composition	Acid component (parts by mole)		Terephthalic acid	65
			Isophthalic acid	20
			Adipic acid	15
	Alcohol component (parts by mole)	C ₃ -C ₁₀ aliphatic diol component (parts by mole)	Cyclohexane dimethanol	15
		Other component	Ethylene glycol	125
Resin composition	Acid component (parts by mole)		Terephthalic acid	64.9
			Isophthalic acid	19.9
			Adipic acid	15.2
	Alcohol component (parts by mole)	C ₃ -C ₁₀ aliphatic diol component (parts by mole)	Cyclohexane dimethanol	15.0
		Other component	Ethylene glycol	87.3
Resin Properties	Softening temperature (°C)			130
	Tg (°C)			48.1
	Acid value (mgKOH/g)			3.3
	Mass average molecular weight Mw			23,000
	Melting point (°C)			None

Table C

		Referential Example 3
	Ratio of mixture of resin (parts by mass)	Resin HM:resin LG = 20:80
	C ₃ -C ₁₀ aliphatic diol component in polyester (A) (parts by mole)	15.0
	Fixability	VG
Resin properties	Offset resistance	P
	Blocking resistance	F
	Gloss	VG

Referential Comparative Example 4

The procedures of Example 1 of the present application for the preparation of Toner 3, Table 3, were repeated except that Resin HL was employed instead of Resin HC.

The results of evaluation of the obtained toner are shown in Table D below.

Table D

		Referential Example 4
	Ratio of mixture of resin (parts by mass)	Resin HL:resin LC = 20:80
Resin properties	Fixability	G
	Offset resistance	G
	Blocking resistance	G
	Gloss	P

I, the undersigned declarant, declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and; further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001, of Title 18, of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signed this 16th day of January , 2007

Shinya Yamato

Shinya Yamato